

APPENDIX A TECHNICAL SPECIFICATIONS

058-18 Purchase of Four (4) New Current Model Year Five Ton 6X4, 14 to 16 Cubic Yard Dump Trucks UPDATED December 19, 2017

1. SCOPE

The purpose of this Invitation to Negotiate (the "ITN") is to solicit pricing and select a vendor for the purchase of four (4) conventional tail swing compact hydraulic tracked mini excavators, all new current model year.

All of the new current model year four (4) various size conventional tail swing compact hydraulic tracked mini excavators have various options (tail swing must not exceed 18"). Two (2) Kubota KX040-4 with 6 in 1 blade (10,000lbs), one (1) Kubota KX057-4 with Angle Blade (13,000lbs) and one (1) Kubota KX080-4 with angle blade (19,300lbs). All units must be tested and delivered to JEA fleet facility (5717 New Kings Road Jacksonville, Florida 32209) in complete operational condition, with all required equipment and documentation by June 1, 2018.

If the Company fails to complete delivery and obtain JEA's Acceptance of the goods on or before June 1, 2018, the Company shall pay JEA the sum of \$23.40 per unit per day for each and every calendar day, including Sundays and Holidays, starting on this day until the date delivery is complete and Accepted by JEA.

2. MODEL

NEW Current Model Year Mini Excavators (2018 or 2019). **KUBOTA KX040-4 with 6 in 1 Blade (10,000 LBS), KUBOTA KX057-4 with Angle Blade (13,000 LBS) and KUBOTA KX080-4 with Angle Blade (19,300 LBS).**



THURMAN C MCGLOTHLIN
904-576-9382

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TECHNICAL REQUIREMENTS, (ALL UNITS)

3. CAB

- 3.1 OSHA Certified ROPS / OPG Enclosed air conditioned cab (Cooling & Heat), with suspension seat and seatbelt.

4. JOY STICK CONTROLS

- 4.1 Ergonomic & readily accessible from the operator seat.

5. BUCKETS & DOZER BLADES

5.1 BUCKETS (QUICK CONNECT)

- KUBOTA KX080-4 with Angle Blade (19,300 LBS): 30" Quick Connect Bucket with replaceable teeth points and bolt on side cutters.
- KUBOTA KX057-4 with Angle Blade (13,000 LBS): 24" Quick Connect Bucket with replaceable teeth points and bolt on side cutters.
- KUBOTA KX040-4 with 6 in 1 Blade (10,000 LBS): 24" Quick Connect Bucket with replaceable teeth points and bolt on side cutters.

5.2 DOZER BLADES

- KUBOTA KX080-4 with Angle Blade (19,300 LBS): Angle Dozer Blade with bolt on replaceable/reversible cutting edge.
- KUBOTA KX057-4 with Angle Blade (13,000 LBS): Angle Dozer Blade with bolt on replaceable/reversible cutting edge.
- KUBOTA KX040-4 with 6 in 1 Blade (10,000 LBS): 6 in 1 Dozer Blade with bolt on replaceable/reversible cutting edge.

6. VANDALISM PROTECTION

- 6.1 **Locking Caps/Compartments:** Required for battery, fuel, hydraulic oil, engine oil and water reservoirs.



- 6.2 **KEY ALL UNITS ALIKE.** (3) complete sets of keys per unit (Including Attachments, Bins & Tool Boxes). KeAll complete sets of keys per unit. Bins & Tool Boxes Alike. Stamp/Engrave JEA PROVIDED 5 Digit Unit Number On All Keys. All locks (including ignition) are to be keyed alike

7. TRAINING / ORIENTATION, MANUALS & DOCUMENTATION

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- 7.1 Must provide TWO (2) onsite JEA Operator Orientation Training Sessions.
- 7.2 Must provide ONE (1) onsite JEA Maintenance Training Session.
- 7.3 Must include ONE (1) operator manual per unit (Hard Copy).
- 7.4 Must include a paper copy Specification / Build Sheet with all units.
- 7.5 Must include/document the **Vin Number, Make, Model Description, JEA PO #, and JEA Provided 5 Digit Unit #** on all **i**nvoices and **e**Change **e**Order **i**nvoices.
- 7.6 Must include a **Current Inspection / Service** with **Decal** installed lower left inside corner of front glass. Decal must include current hours, current Inspection date, next service due date and next service due hours.

8. COLOR/GRAPHICS

- 8.1 Manufacturer's standard color.
- 8.2 Delete all vendor and manufacturer identification decals **except required** safety & reference identification tags, decals, data plates & placards.

9. WARRANTY

- 9.1 One (1) Year Full Machine Warranty including Travel Time and Mileage. Must include all Standard Manufacturer's Warranties.
- 9.2 Warranty period starts when units received at the JEA Fleet Facility, Inspected and Accepted.

10. PARTS AVAILABILITY

- 10.1 Engine Oil Filters, Hydraulic Filters, Tracks, Sprockets, Pins, Rollers & Etc. must be readily available within 48 hours.

11. ADDITIONAL REQUIRED EQUIPMENT / OPTIONS (ALL UNITS)

If not furnished as standard equipment/options, the following items shall be furnished, installed and included in the bid price

- 11.1 Oil pressure, engine temperature, hydraulic temperature and charging indicator or gauges in cab.
- 11.2 **LED Work Lights:** 2 front mounted and 2 rear mounted on upper corners of cab and 1 mounted on boom.
- 11.3 Hydraulic system temperature warning light.
- 11.4 **Enclosed Conditioned Cab:** Cooling & Heating.
- 11.5 Excavator/Crawler & Back Hoe Mode.
- 11.6 **INCLUDE ALL Plumbing & Controls for Hydraulic Attachments:** Thumb, Handy Ram, Hyd. Saw Etc.
- 11.8 **Automatic Grease/Lubrication System:** LINCOLN or EQUAL.

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- 11.9 Back Up Camera with Travel Up Alarm.
- 11.10 **Auxiliary/Accessory Fuse Panel:** To wire GPS, Fuel Rings, Strobe Lights & Etc. See Example Below

Blue Sea Systems ST Blade ATO/ATC Fuse Blocks Style Name: 12-Circ Split w/Cover & Neg



- 11.11 **4" HD D-Ring:** Welded to back of bucket for lifting (Rated for Bucket/Boom Capacity).
- 11.12 **Hard Facing:** Push Blade, Back of Bucket & Sides of Bucket. See Required Design and Material Pictured Below:



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11.12 **MASTER SWITCH WITH LOCKOUT/TAGOUT:** Mount in the battery compartment with the correct size/type of wire.

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BASE TECHNICAL REQUIREMENTS: KUBOTA KX080-4 Angle Blade (19,300 LBS), ONE (1) Unit.

12. ENGINE (DIESEL)

- 12.1 **Four Cylinder:** Liquid Cooled with minimum 66 SAE Gross HP.
- 12.2 **Displacement:** Minimum 202 CID.
- 12.3 **ANTI FREEZE:** Extended Life, Highest Quality Available with Corrosion Protection.
- 12.4 **Exhaust:** Include rain cap if required.
- 12.5 **AIR CLEANER:** Dry type with service indicator.

13. ELECTRICAL SYSTEM

- 13.1 Twelve volt system with minimum 80-amp alternator.
- 13.2 Electric tachometer and fuel shutoff.
- 13.3 Safety start device.
- 13.4 Batteries with 500 CCA minimum.

14. FUEL TANK

- 14.1 **Capacity:** Minimum 30 gallons with operator station fuel gauge.

15. CAPABILITY: BOOM & DOZER ANGLE BLADE

- 15.1 **Boom Digging Radius At Ground Level:** Between 23' and 24'.
- 15.2 **Boom Digging Depth:** Between 15' and 15'5".
- 15.3 **Boom Dumping Height:** Between 17' and 18'.

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15.4 **DOZER BLADE Drop Below Ground:** Between 25" and 26".

15.5 **DOZER BLADE Angle Capability:** 25 Degrees.

15.6 **DOZER BLADE Lift Above Ground:** Between 22" and 23".

16. DRAWBAR PULL

16.1 **Max Drawbar Pull:** 12,000 lbs. or greater

17. GRADEABILITY

17.1 Minimum gradeability 28 degrees.

18. HEIGHT, LENGTH AND WIDTH (Rubber Belt Tracks)

18.1 Overall Height: Must not exceed 8'6".

18.2 Overall Length (Stowed Position): Must not exceed 22'.

18.3 Overall Width: Must not exceed 7'4".

19. HYDRAULIC SYSTEM

19.1 Hydraulic Pump Capacity: 19 GPM Variable x 2 / 17.6 GPM Gear x 1.

19.2 Max Breakout Force:

- BUCKET - BETWEEN 14,660 LBF & 14,700 LBF.
- ARM - BETWEEN 8,550 LBF. & 8,560 LBF.

20. WEIGHT

20.1 OPERATING WEIGHT MUST BE BETWEEN 18,500 lb. & 20,000 lbs. USING MANUFACTURER'S STANDARD COUNTER WEIGHT AND 30", BUCKET. NO OPTIONAL COUNTERWEIGHT SHALL BE USED IN ORDER TO BRING THE MACHINE TO THE MINIMUM WEIGHT SPECIFIED.

BASE TECHNICAL REQUIREMENTS: KUBOTA KX057-4 Angle Blade (13,000 LBS), ONE (1) Unit.

21. ENGINE (DIESEL)

21.1 **Four Cylinders:** Liquid cooled, minimum 47 SAE Gross HP.

21.2 **Displacement:** minimum 158 CID.

12.3 **ANTI FREEZE:** Extended Life, Highest Quality Available with Corrosion Protection.

12.4 **Exhaust:** Include rain cap if required.

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12.5 **AIR CLEANER:** Dry type with service indicator.

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22. ELECTRICAL SYSTEM

22.1 Twelve volt system with minimum 60 amp alternator.

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22.2 Electric tachometer and fuel shutoff.

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22.3 A safety start device.

22.4 Batteries with 550 CCA minimum.

23. FUEL TANK

23.1 **Capacity:** Minimum 19 gallons with operator station fuel gauge.

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24. CAPABILITY: BOOM & DOZER ANGLE BLADE

24.1 **Boom Digging Radius At Ground Level:** Between 20' and 21'.

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24.2 **Boom Digging Depth:** Between 12'8" and 13'.

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24.3 **Boom Dumping Height:** Between 13'8" and 14'.

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24.4 **DOZER BLADE Drop Below Ground:** Between 18" and 19".

24.5 **DOZER BLADE Angle Capability:** 25 Degrees.

24.6 **DOZER BLADE Lift Above Ground:** Between 20" and 21".

25. DRAWBAR PULL

25.1 **Max Drawbar Pull:** 14,000 lbs. or greater.

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26. GRADEABILITY

26.1.1 Minimum gradeability: 25 degrees.

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27. HEIGHT, LENGTH AND WIDTH (Rubber Belt Tracks)

27.1 Overall Height: Must not exceed 8'6".

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27.2 Overall Length (Stowed Position): Must not exceed 19'6".

27.3 Overall Width: Must not exceed 6'6".

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28. HYDRAULIC SYSTEM

28.1 Hydraulic Pump Capacity: 14.8 GPM Variable x 2 / 9.8 GPM Gear x 1

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- 28.2 Max Breakout Force:
- Bucket-Between 11170 LBF & 11200 LBF.
 - Arm-Between 5640 LBF. & 5700 LBF.

29. WEIGHT

- 29.1 OPERATING WEIGHT MUST BE BETWEEN 12,000 lbs. & 13,000 lbs. USING MANUFACTURER'S STANDARD COUNTER WEIGHT AND 24", BUCKET. NO OPTIONAL COUNTERWEIGHT SHALL BE USED IN ORDER TO BRING THE MACHINE TO THE MINIMUM WEIGHT SPECIFIED.

BASE TECHNICAL REQUIREMENTS: KUBOTA KX040-4 with 6 in 1 Blade (13,000 LBS), TWO (2) Units.

30. ENGINE (DIESEL)

- 31.1 **Three Cylinders:** Liquid cooled, minimum 40 SAE Gross HP.
- 31.2 **Displacement:** minimum 111 CID.
- 31.3 **ANTI FREEZE:** Extended Life, Highest Quality Available with Corrosion Protection.
- 32.4 **Exhaust:** Include rain cap if required.
- 32.5 **AIR CLEANER:** Dry type with service indicator.

31. ELECTRICAL SYSTEM

- 31.1 Twelve volt system with minimum 60 amp alternator.
- 31.2 Electric tachometer and fuel shutoff.
- 31.3 A safety start device.
- 31.4 Batteries with 550 CCA minimum.

32. FUEL TANK

- 32.1 **Capacity:** Minimum 16 gallons with operator station fuel gauge.

33. CAPABILITY: BOOM & DOZER 6 IN 1 BLADE

- 33.1 **Boom Digging Radius At Ground Level:** Between 17' and 18'.
- 33.2 **Boom Digging Depth:** Between 11'2" and 12'.
- 33.3 **Boom Dumping Height:** Between 12'9" and 13'.
- 33.4 **DOZER BLADE Drop Below Ground:** Between 19" and 21".
- 33.5 **DOZER BLADE Angle Capability:** 25 Degrees

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33.6 **DOZER BLADE Lift Above Ground:** Between 16" and 17".

34. DRAWBAR PULL

34.1 **Max Drawbar Pull:** 15,000 lbs. or greater

35. GRADEABILITY

35.1 Minimum gradeability: 25 degrees.

36. HEIGHT, LENGTH AND WIDTH (Rubber Belt Tracks)

36.1 Overall Height: Must not exceed 8'6".

36.2 Overall Length (Stowed Position): Must not exceed 17'.

36.3 Overall Width: Must not exceed 6'2".

37. HYDRAULIC SYSTEM

37.1 Hydraulic Pump Capacity: Between 24 GPM & 25 GPM.

37.2 Max Breakout Force:

- Bucket-Between 9530 LBF. & 96,000 LBF.
- Arm-Between 4112 LBF. & 4200 LBF.

38. WEIGHT

38.1 OPERATING WEIGHT MUST BE BETWEEN 9,500 lbs. & 10,500 lbs. USING MANUFACTURER'S STANDARD COUNTER WEIGHT AND 24", BUCKET. NO OPTIONAL COUNTERWEIGHT SHALL BE USED IN ORDER TO BRING THE MACHINE TO THE MINIMUM WEIGHT SPECIFIED.

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NOTE: All Units, Attachments, Products & Services must meet & comply with all applicable regulations and specifications including but not limited to Federal and State Laws, OSHA Regulations, ANSI Standards, DOT Regulations and ASTM Standards. All Units must be delivered to the JEA Fleet Facility with a minimum $\frac{3}{4}$ tank of fuel. Contact **Mark Murray** at **904-328-8501** 48 Hours prior to delivery. Delivery times are **Monday through Friday 08:00 AM – 03:00 PM** at **5717 New Kings Road Jacksonville Florida, 32209.**

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